Clinical Intelligence

Tim G Martindale and Katie Pink

Tips for GP trainees working in respiratory medicine

Respiratory medicine has a lot to offer the trainee. It's a great mixture of both acute and chronic illnesses, from the young with asthma and pneumonia to older patients with chronic obstructive pulmonary disease (COPD) and lung cancer. There are practical procedures aplenty, and you will get very good at arterial blood gases (ABGs) and get the chance to perform invasive procedures such as chest drains; often as the 'Respiratory SHO', you get bleeped to insert them for other teams. There's a lot of the social side too, and that invariably includes relatives and the emotion that goes with a new diagnosis of cancer or just the realisation that one will never be able to return home due to a decline in lung function. As with every new job, do take time at the beginning of the firm to ask what you want to achieve out of the job and how it will benefit you as a GP trainee. If you don't do this early, you'll find yourself halfway through the job before you realise it. The chronic aspects of respiratory disease are perhaps the most important thing for GP trainees to take out of the attachment, and these are really only learned by clerking in people in clinic and presenting to the consultants. Of course, at the time there are so many other things which need doing on the ward, but remember that you are a GP trainee not a F1 anymore and clinic is a very valuable part of your education!

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E-mail: timmartindale@doctors.org.uk Submitted: 19 August 2011; final acceptance:

©British Journal of General Practice 2012; 62: 109-110.

DOI: 10.3399/bjgp12X625337

THE BASICS

- 1. Primum non nocere.
- 2. The respiratory ward is usually very busy but if your team's organised then you can usually be home on time.
- 3. Lung cancer accounts for a large number of respiratory inpatients. Involve the clinical nurse specialists or palliative care nurses as appropriate. Be aware of the oncological emergencies in these patients: hypercalcaemia, spinal cord compression, and superior vena cava compression.

- 4. Spend some time with the asthma nurse — they are an invaluable source of advice and guidelines.
- 5. Use the senior nurse's experience.
- 6. Learn the British Thoracic Society (BTS) asthma quidelines — they're bound to be in postgraduate exams.
- 7. If in doubt, ask!
- 8. Learn the colour of inhalers. Patients seldom know what they contain. If they don't know the colours, then suspect non-compliance!
- 9. The CURB-65 (confusion, urea nitrogen, respiratory rate, blood pressure, ≥65 years of age) score is only applicable to pneumonia.
- 10.Beware of asthma. Patients can deteriorate rapidly. Remember that a normal or rising CO2 level in an acute exacerbation is a sign of a patient getting tired. Involve the intensive care unit (ICU) and your senior. This time, don't wait for the consultant ward round.
- 11. There is quite often a psychological component to asthma.
- 12. Oxygen should be prescribed according to the target oxygen saturations you are trying to achieve. In acutely unwell patients, this should be 94-98%; in patients at risk of hypercapnic respiratory failure, this should be 88-92%.
- 13. Ask radiologists for 'their opinion' on a clinical case, rather than demanding a scan be done. Generally this means you get what you wanted in the first place, only more quickly and without any tears. If you don't know why you're requesting a scan, check with your senior first.
- 14. Chest physiotherapists are absolutely and utterly invaluable. Get to know them early and use them for sputum retention and dyspnoea.
- 15.Get to know the Fletcher-Peto curve (Figure 1).1 It is a very valuable evidenced-based way of persuading people to stop smoking.

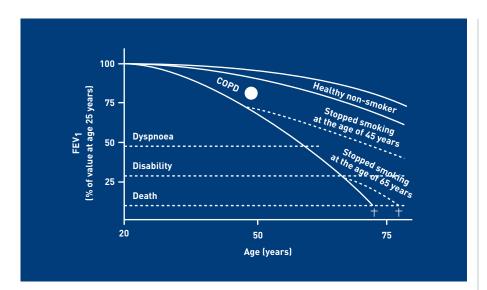


Figure 1. The Fletcher-Peto curve.1 FEV1 = forced expiratory volume in 1 s. Reproduced from Thorax, Bednarek M, Gorecka D, Wielgomas J, et al, 61: 869-873, 2006, with permission from BMJ Publishing Group Ltd.1

COMMUNICATION AND DOCUMENTATION

- 16. You will be busy. Make sure you are organised and this will help. An up-todate patient list with a diagnosis and outstanding of notes any investigations/jobs to do is essential.
- 17. Have a 'board round' in the early afternoon to delegate jobs.
- 18. Cancer isn't cancer until it's under the microscope; however, signpost early.
- 19. Communication is key in non-invasive ventilation: try a mask on and experience the claustrophobia.
- 20. If you take the time to have a family conversation, take the time to document it properly.
- 21. Make your specialist registrar or consultant make 'resus' decisions on patients early. It is unfair for relatives and doctors to leave it to the on-call team when the patient is peri-arrest at the weekend.
- 22. Watch an older person with rheumatoid arthritis trying to use an inhaler, and then go and read up about different types of inhaler.
- 23. Make sure you know the ceiling of care for patients who are started on noninvasive ventilation. If they do not improve, should they receive intubation and ventilation or palliative care?

SKILLS AND MANAGEMENT

- 24. NEVER do a procedure you are not comfortable doing.
- 25. Consider venous thromboembolism prophylaxis in everyone: dehydration, asthma/COPD, and pulmonary embolism (PE) don't go very well together, and in-hospital PEs are largely preventable.

- 26.Unless in extremis, use 2.5 mg of nebulised salbutamol only — you can always give two nebulisers but it's really easy to become horribly tachycardic and hypokalaemic with repeated doses of 5 mg.
- 27. Chest drains should only be inserted by a clinician who is skilled in the technique. Nowadays they are inserted under ultrasound guidance for pleural effusions. There is no organ in the abdomen that has not been perforated with a chest drain trochar.
- 28. The painful part of chest drains is the pleura — anaesthetise generously (maximum 3 mg/kg lidocaine or 2 mg/kg bupivacaine). Ensure adequate oral analgesia.
- 29. Never clamp a bubbling chest drain.
- 30. If you insert a chest drain for drainage of an effusion, stay with the patient until you see how quickly it drains - if a significant amount comes out or the bottle starts filling up quickly, then it will need clamping or the patient may develop rebound pulmonary oedema and subsequent cardiac arrest.
- 31. Use local anaesthetic for ABGs they're horrible if you don't.
- 32. Try and get a 'well' ABG prior to discharge — it's useful to know, for next time, what the blood gas is when recovered.
- 33. Escalate to the intensive therapy unit (ITU) early if appropriate. This really should be consultant led.
- 34. Reviewing previous sputum culture results is always useful before starting antibiotics in patients with chronic conditions. respiratory This particularly the case for bronchiectasis. Treatment can be tailored to treat whichever organisms are colonising the patient.

Provenance

Freely submitted; not externally peer reviewed.

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REFERENCE

1. Bednarek M, Gorecka D, Wielgomas J, et al. Smokers with airway obstruction are more likely to quit smoking. Thorax 2006; 61(10): 869-873